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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/735,488      | 12/14/2000  | Masatoshi Takaira    | 018656-196          | 8369             |

21839 7590 04/21/2006

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EXAMINER

LETT, THOMAS J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2625

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/735,488

**Applicant(s)**

TAKAIRA ET AL.

**Examiner**

Thomas J. Lett

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-5 and 7-16 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

2. Claim 6 is allowed.
3. The following is an examiner's statement of reasons for allowance: the prior art of record, including Miura et al, Tsuzuki et al, and Kashihara, fails to teach or suggest, alone or in combination, a signal generator that generates horizontal synchronization signals issued based on an operation timing for each line in the printing unit, and switching means that, in response to a rise and a fall of the horizontal synchronization signals, switches the bus between transmission from the image reader to the external computer and transmission from the external computer to the printing unit, whereas scan image data for one line taken out of the read buffer and print image data for one line taken out of the print buffer are alternately transferred via the bus.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 5, 7, 10-12, and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kita et al (USPN 5,021,892).

With respect to claim 1, Kita et al disclose a digital copying machine (multifunctional image processing device 1, Fig. 1, col. 3, lines 28-33) comprising:

an image reader (image scanner 2, col. 3, lines 33-36) that reads an image of the original document and generates image data,

a printing unit (image printer 3, col. 3, lines 36-39) that prints based on image data,

a bus (common data bus DB, col. 4, lines 50-51) that transmits the image data generated by the image reader to an external computer (image data read by the scanner is output to the personal computer 8, col. 7, lines 1-2) and that transmits image data from the external computer to the printing unit (personal computer 8 transfers data to image printer 3, col. 7, lines 5-7),

a signal generator (main CPU 50, col. 4, lines 46-49) that generates a signal based on an operation timing of the printing unit, and

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switching means (image input function, col. 6, line 67 - col. 7, line 4) that, in response to the signal, switches the bus between transmission from the image reader to the external computer (image data read by the scanner is output to the personal computer 8, col. 7, lines 1-2) and transmission from the external computer to the printing unit (personal computer 8 transfers data to image printer 3, col. 7, lines 5-7).

With respect to claim 4, Kita et al disclose a digital copying machine as claimed in claim 1, said bus includes a read buffer that temporarily stores the image data read by the image reader (col. 6, lines 2-5).

With respect to claim 5, Kita et al disclose a digital copying machine as claimed in claim 1, said bus includes a print buffer that temporarily stores the image data sent by the external computer (image printer control section, which includes a line buffer for storing line data to be recorded, col. 5, lines 53-56).

Claim 7, a method claim, is rejected for the same reason as that of claim 1.

Claim 10, a method claim, is rejected for the same reason as that of claim 4.

Claim 11, a method claim, is rejected for the same reason as that of claim 5.

Claim 12, a method claim, is rejected for the same reason as that of claim 1.

Claim 15, a method claim, is rejected for the same reason as that of claim 4.

Claim 16, a method claim, is rejected for the same reason as that of claim 5.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2,3,8,9,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kita et al (USPN 5,021,892) in view of Nagashima et al (USPN 5,581,613).

With respect to claim 2, Kita et al do not disclose a digital copying machine as claimed in claim 1, said signal generated by the signal generator (image clock, col. 3, line 33) is a clock signal issued based on an operation timing for each pixel (image sync signal, col. 3, line 33).

Nagashima et al disclose an image clock (col. 3, line 33) and an image sync signal (col. 3, line 33) to synchronize image data.

Kita et al and Nagashima et al are analogous art because they are from the similar problem solving area of data transfer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the timing feature of Nagashima et al to the apparatus of Kita et al in order to obtain the capability to maximize the use of a data bus. The motivation for doing so would be to efficiently share a data bus.

With respect to claim 3, Kita et al do not disclose a digital copying machine as claimed in claim 1, said signal generated by the signal generator is a horizontal synchronization signal issued based on an operation timing for each line.

Nagashima discloses timing signals (see Figs. 2 and 5) used for synchronization of image data.

Kita et al and Nagashima et al are analogous art because they are from the similar problem solving area of data transfer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the timing feature of Nagashima et al to the apparatus of Kita et al in order to obtain the capability to maximize the use of a data bus. The motivation for doing so would be to efficiently share a data bus.

Claim 8, a method claim, is rejected for the same reason as that of claim 2.

Claim 9, a method claim, is rejected for the same reason as that of claim 3.

Claim 13, a method claim, is rejected for the same reason as that of claim 2.

Claim 14, a method claim, is rejected for the same reason as that of claim 3.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Lett whose telephone number is (571) 272-7464. The examiner can normally be reached on 7-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJL



MARK WALLERSON  
PRIMARY EXAMINER